PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-021572
(43)Date of publication of application : 21.01.2000

(51)Int.Cl. H05B 33/14
C09K 11/06
H05B 33/22

(21)Application number : 10-190177
(22)Date of filing : 06.07.1998

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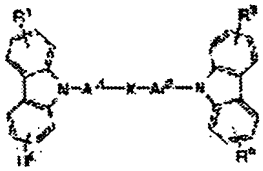
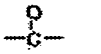
(54) ORGANIC ELECTROLUMINESCANCE ELEMENT

(57)Abstract:
PROBLEM TO BE SOLVED: To provide high heat resistance and to provide a stable blue light emission excellent in color purity by including a diamine compound having a substituent in a light emitting layer.
SOLUTION: A compound expressed by formula I is included in a light emitting layer of an organic EL element. In formula I, Ar1 and Ar2 are each an aromatic hydrocarbon ring radical and an aromatic heterocyclic group; and R1 to R4 are each a hydrogen atom, halogen atom, alkyl group, aralkyl group, alkenyl group, allyl group, cyano group, amino group, acryl group, alkoxycarbonyl group, carboxyl group, hydroxyl group, amide group, aryloxy group, aromatic hydrocarbon ring radical and aromatic heterocyclic group. X is a bivalent connecting group, and is selected from a direct bond or a connecting group expressed by formula II, formula III, formula IV and formula V. Ar3 in the formula V is expressed by formula VI. R5 to R8 in formula VI are either of groups of R1 to R4 in formula I. A film thickness of a light emitting layer is normally 10 to 200 nm, and is desirably 30 to 100 nm.



I



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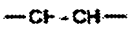
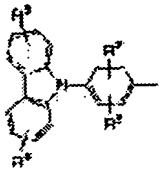


III

IV

V



VI

LEGAL STATUS

[Date of request for examination] 07.10.2002

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]